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*In memoriam: George Newbold
Lawrence. Born 20th Oct., ...*

Daniel Giraud Elliot

HARVARD UNIVERSITY.



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IN MEMORIAM: GEORGE NEWBOLD LAWRENCE.

Born, 20th Oct., 1806. Died, 17th Jan., 1895.

BY D. G. ELLIOT, F. R. S. E.

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Geo. N. Lawrence.



Samuel

*L. S. Foster Esq
Compliments of
D. G. Elliot*

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IN MEMORIAM: GEORGE NEWBOLD LAWRENCE.¹

Born, 20th Oct., 1806. Died, 17th Jan., 1895.

BY D. G. ELLIOT, F. R. S. E.

"To him who in the love of Nature holds
Communion with her visible forms, she speaks
A various language,"

and none can understand her rythmic lines so well as he who has taken the denizens of the forest and the fields into intimate fellowship with himself, and gained them for his own familiar friends. With such a one Nature holds especial converse, and unfolds to him the secrets hidden from all ordinary eyes. The way of a serpent on a rock, and of an eagle in the air, the wisest of men confessed he was unable to understand, and yet by many, in the closing years of this nineteenth century, profiting by their own, and the labors of those who have preceded them, in the close and earnest study of Nature's laws and methods, much more intricate and obtruse problems than those which perplexed the King of Israel have been clearly comprehended. In that branch of science which relates to the living things of earth, and

¹ An address delivered at the Thirteenth Congress of the American Ornithologists' Union, at Washington, D. C., Nov. 12, 1895.

reflecting upon what has been accomplished in solving its mysteries, we look back upon the past, and behold, from out the mists of by-gone years shadowy forms arise refulgent with the glory of illustrious names, won by their possessors when in the flesh they struggled in this earthly literary arena, and who by the influence they exert in their works, remain with us still conquerors in the fight, though dead. How long that shadowy line has grown, and how far back into the silent past it reaches, and how rapidly, alas for the living, is that column augmented, of those scientific soldiers, who though they were members of different companies and regiments, yet each and all battled for the same cause, and died conscious of having fought a good fight, and upheld the scientific faith. In their written words they still speak to us, and point out the lines which their successors are to follow. While our thoughts are thus directed to this invisible army of once earnest earthly workers, we are reminded that we have assembled here to-day to pay our tribute of respect to one who but lately has gone to join that shadowy host, and who while with us was an honored member of this Union, a distinguished ornithologist, and to some of us a personal valued friend.

In the death of George Newbold Lawrence, though the great number of his accomplished years had diminished his scientific activity, ornithology has met with a serious loss. Born in the city of New York in 1806, his life was lengthened to almost thrice the period usually given to the generations of men, but the judgment passed by the Psalmist, on the years that exceeded those allotted to man, that they should bring nothing but "labor and sorrow," was never written for him, and the evening of his days was the most peaceful of his long life. Born in 1806, and gone from among us, as it seems but yesterday, think of the extent of time encompassed in the duration of this single life. Almost a century of active work, in the daily pursuit of an engrossing business, in the field studying the ways of our feathered creatures, in the closet laboring to solve perplexing problems that had to be met, in all that busy century of his existence there was little time yielded to idle recreation. During the period covered by this life was witnessed the rise,

progress, and attainment to its present important position in Natural Science, of American Ornithology. In 1806 there were no American ornithologists. He who was to shed so great a lustre upon the science by his immortal work, had as yet given no outward sign, and at this date Audubon, a young man, was unknown. Wilson was busy preparing his work upon our birds, which, however, did not make its appearance until two years after Mr. Lawrence's birth. As we come down the years harken to the catalogue of names of celebrated men who have adorned the annals of ornithology in this land, finished their work, and passed over the river beyond the unknown farther shore. Beside the two already mentioned we recall Bonaparte, Jameson, Jardine, Ord, Say, Swainson, Richardson, Nuttall, Prince of Wied, Giraud, DeKay, Townsend, Cassin, Baird, Hermann, Suckley, Kennicott, beside many that are still active workers in the cause. But all of these who have been mentioned were the friends and acquaintances of Mr. Lawrence. They died not, most of them, in their early youth, cut off in the midst of their powers, with the hand still guiding the plough of investigation and research through an unfinished scientific furrow, but, on the contrary, many of them saw the accomplishment of their desires in their completed works and the attainment of advanced years. But time seemed to take no heed of our friend, touched not his powers, but left him unscathed, alert and active in the midst of his contemporaries falling about him on every side.

The Lawrence family from which the ornithologist descended was English, residing at Great St. Albans, Hertfordshire, and the first members to come to this country, where they arrived in 1635, were John and William, aged seventeen and twelve respectively, with their mother and sister. They settled first at Plymouth Colony, and then, in 1644, removed to Long Island where John became one of the Patentees of Hempstead. In the following year they moved to Flushing where the brothers, with others, obtained the patent of that place. John, in 1658, removed to New Amsterdam, and was one of the first aldermen of New York after its incorporation and change of name by the English, and its mayor in 1672. William, from whom Lawrence's branch descended,

continued to reside at Flushing, where he married Elizabeth Smith of Smithtown. After his death, his widow married Sir Philip Carteret, Governor of New Jersey, who named Elizabethtown after her.

From his earliest youth George Lawrence was a lover of birds, and passed much of his spare time studying their habits. But the early age when he entered actively in business (for he was only sixteen when he became a clerk, and twenty when he was made a partner in his father's house), did not permit him to have much leisure to devote to ornithology. In 1820, he was permitted to have a gun, seventy-five years ago! and then he began to pay attention to the movements of the feathered hosts, their arrival and departure in the spring and autumn. At this time he was living during the summer at his father's country place, called 'Forest Hill,' about eight miles from the City Hall, on the high ground overlooking Manhattanville and the Hudson River, not very far distant from where the American Museum of Natural History now stands. He has, in one of his papers, recorded his observations of bird migration at this spot, which in view of our knowledge of the locality as it is to-day, sounds very strangely to us. From the middle of July for some weeks there would be, every afternoon, a flight of Red-winged Blackbirds (*Agelaius phoeniceus*), in flocks of fifty or more individuals, while in August and September there would be late in the day a continuous flight of White-bellied Swallows (*Tachycineta bicolor*), with a few Barn Swallows (*Chelidon erythrogaster*). At the beginning of September, when there was a strong northwest wind, Passenger Pigeons (*Ectopistes migratorius*) would appear in great numbers in the mornings, with occasional flocks throughout the day. From Forest Hill north was an unbroken forest to Fort Washington Point, and the Pigeons could be seen speeding over the tree tops at a rate of seventy-five miles or more an hour. Another of the old country seats at that time was Claremont, now for some years used as a restaurant and situated not far from General Grant's tomb, and during one of these flights of the Pigeons more than a hundred were shot one morning by a gentleman from the roof of the dwelling. He enumerates many other species of birds that passed Forest Hill during the various months of the summer, and also speaks of the Robins pursued by gunners in

the high woods where is now Third Avenue and 20th Street. At the time the Robins were migrating there would frequently be seen large flocks of Meadowlarks (*Sturnella magna*) going south, and they would congregate in great numbers in what were then pasture fields, about where Broadway and 40th Street now is. He tells of skating from where the Tombs now stand in Centre Street, down the Canal that ran through the middle of Canal Street, passing under the wooden bridge that spanned it at Broadway, onto the Lispenard's meadows which stretched away to the Hudson River. To those of us who are conversant with the localities in the metropolis just mentioned, it seems strange indeed to hear one who has but just left us speak of them as familiar ground to him, when they were yet covered in great part by the primeval woods. It brings to our minds more forcibly than almost anything else can what seventy-five years in the life of our country, and of one single witness means.

It was while the Lawrences were living at Forest Hill that J. J. Audubon purchased several acres and built his house in what is now known as Audubon Park. Lawrence became intimate with his sons, Victor and John, yet he saw but little of the naturalist himself, who was then failing in health.

While thus studying the feathered tribes in his youth and early manhood, his knowledge did not extend beyond that gained from observation of birds' habits, and such appreciation of the subject as the possession of a few specimens enabled him to acquire, but ornithology as a science was unknown to him. Thus time passed on, and Lawrence was recognized as the successful merchant with, perhaps to a few of his friends, a great fondness for birds, but there was no evidence that he was in later years to become one of the great triumvirate, of what has been termed the Bairdian Epoch of American Ornithology.

In the year 1841 occurred one of those apparently trifling incidents in one's life that often alter its entire current, and which in this instance served to change Lawrence's interest in birds (which up to this period had been merely regarded as a pastime) into a serious scientific study. He and J. P. Giraud, who were among the first to make collections of birds found in the United States, were invited by Mr. J. G. Bell to come to his

room to meet a young ornithologist who was to show some facts in the anatomy of birds, especially exhibiting the muscles that move the wings. He then and there made the acquaintance of Spencer F. Baird, than whom no naturalist that ever lived possessed to such a degree the power to imbue others with his own enthusiasm, and to attract them to become devotees of the study of Nature's Kingdom by the irresistible magnetism of his own personality. The acquaintance thus formed soon ripened into an intimacy that never ceased nor slackened, but strengthened with the rolling years, until, like so many of Lawrence's fellow-workers, his guide and friend passed away from earth.

This friendship with Baird brought forth almost immediate results, and in 1842, when he was thirty-six years of age, appeared Lawrence's first scientific paper, the pioneer of that long line of publications which was destined to extend throughout the next fifty years. It was devoted to a description of the Black Brant (*Bernicla nigricans*), and with a happier fate than falls to the efforts of many budding ornithologists thirsting for immortality, this new creation was pronounced very good. Once launched in scientific work, every moment that could be snatched from mercantile pursuits that claimed the major portion of the day was given to the investigation of birds, and his contributions to different periodicals devoted to natural science increased in frequency and importance. Nearly at the same time with the advent of Lawrence's first paper, appeared one from the pen of a new writer, who was also to be associated with Lawrence in some of his most important work, and who by his great attainments and profound widespread knowledge in ornithological lore was to exert a deep and powerful influence on the science, and cause the name of John Cassin to be known and held in high repute throughout the world. It is fitting that as this form in shadowy lines moves across the vista of passed scenes, I should pay a tribute to one who perhaps more than any other was my guide and instructor in natural science, and who in certain lines of scientific investigation stood without a peer amid those whose works have dignified and rendered illustrious American ornithology. Baird, Cassin, Lawrence,— these were the names that represented for many years our science in the New World, the triumvirate

that dominated the period in which they unitedly labored. In 1869, in the midst of his powers, when it seemed there might be many years of profitable work yet in store, Cassin passed away, followed later by Baird, with labors more completely finished; and now it has fallen to my lot, who, when I first became acquainted with these celebrated men, was regarded by them but as an enthusiastic boy, to pay such tribute as I may to Lawrence who has laid down his pen after accomplishing the fullness of his years, his labors completely ended.

For the first ten years or so of his literary work, Lawrence was engaged in investigating the birds of the United States, and describing new forms, and his labors in the avifauna north of Mexico largely ceased with the completion of his portion of the ninth volume of the Pacific Railroad Reports, the fruit of the joint labors of Baird, Cassin, and Lawrence. This work created a revolution in the technicalities and methods of American ornithology, sweeping away all the old land-marks, and introducing a new era, a new system, and practically a new science. Lawrence's part in this great work was restricted to such of the water birds as were comprised in the Longipennes, Totipalmi, and Brachypteri. From this year, 1858, to the end of his scientific career, Lawrence devoted himself mainly to the birds of Central and South America, Cuba and the West India Islands, and he published continuously for nearly fifty years, his last paper appearing in 'The Auk,' in January, 1891. During his active scientific life he published in all one hundred and twenty-one papers, and described three hundred and twenty-three species as new, most of which have stood the test of subsequent investigation. In his work he showed much patient research, was slow to arrive at a conclusion, careful in all his comparisons, diligent in seeking his authorities, ever ready and willing to receive suggestions, and to acknowledge any error he might inadvertently have committed. Man is born to commit errors. I think naturalists are more convinced of that fact than any other class, but those who admit having done so are the exceptions, and therefore entitled to the more honor.

Lawrence's writings were mainly confined to the description of new forms, or lists of the birds in certain localities, and he never attempted monographic essays, or to embody his views and the

results of his investigations in a complete book form, but he was a faithful laborer in laying the foundation upon which others might raise a noble edifice. His knowledge of the birds of the New World was great and varied, and no one was ever more willing than he to place it all at the service of any seeking information. Systematic ornithology, and the great and absorbing questions of distribution, causes of migration, evolution, effects of environment on races and species, natural selection, and similar problems that have engaged the attention of many of his contemporaries in late years, were passed unheeded, and he was satisfied to restrict his work to the simpler branches of the science. But it is necessary in the construction of any great building that artificers of every rank and degree of skill should be available in order to produce the united, complete, and harmonious whole; and so it is fortunate for our science in the New World that it found so capable a master-workman, willing to devote his time and abilities to the formation and strengthening of the first stories of her stately edifice. The value of his labors was acknowledged throughout the world by ornithologists of every nation, and recognition was accorded him by a large number of learned and scientific societies. He was an Honorary Member of this Union, as well as one of its Founders and Member of its Council; also an Honorary Member of the Linnæan Society of New York, Foreign Member of the British Ornithologists' Union, Member of the New York Historical and Geographical Societies, Corresponding Member of the Zoölogical Society of London, of the Academy of Natural Sciences of Philadelphia, of the Natural History Society of Boston, and many others.

He was an active and important member of the New York Lyceum of Natural History, which he joined in 1845, famous throughout the world wherever zoölogical science is known, but now engulfed in the New York Academy of Sciences. It was through the exertions and faithfulness of Lawrence and a few other devoted men of his generation, that this old historic society was kept alive in the time of its greatest need, and I remember well the little band that used to meet once a week in the College of Physicians and Surgeons on 14th Street in the sixties, and, under the presidency of Major Delafield, read their papers and

discuss subjects of mutual interest. In this company Lawrence was always present, and he published all, or nearly all his writings in the 'Annals' of the Society, until it disappeared in the one with a more resounding name; but to the suppression of the title under which the old corporation had gained an enviable rank throughout the world, he was never reconciled. He, however, became a member, which indeed was his of right, then Fellow, and finally a Patron of the Lyceum's successor. He was one of the founders of the New York College of Pharmacy. In recognition of his labors, his brother ornithologists throughout the world conferred his name upon one genus and twenty species of birds, a more enduring monument than any raised from bronze or marble.

Lawrence's rank as an ornithologist will always be a prominent one, on account of the particular period of his activity, the men with whom he was associated, and the patient, faithful character of his scientific work, and his name will always adorn the annals of American ornithology.

But it is of the man himself, rather than the ornithologist, that I best like to think and speak. I cannot recollect the time when I did not know George N. Lawrence, and from the closest intimacy with his sons and various other members of his family, and the mutual interest in our sciences that naturally brought us together, I suppose it can be said that I knew him better than did any other naturalist, not even excepting Baird. Courteous, gentle, simple in his tastes and habits, almost child-like in his deference to the opinions of others in whom he reposed confidence, asserting his own opinions with a modesty that was remarkable, because so rare, Lawrence was a conspicuous example of that personage to whom we all turn with mingled feelings of admiration and respect — a gentlemen of the Old School, of the days of our ancestors, when knee breeches and brocaded silks were parts of the ordinary costume, and the manners of the age were characterized by dignity and a respectful demeanor. Although verging on to four score and ten years, Lawrence never grew old, and his interests in the sports of the fields and the occupations of youth were as lively and intense in his last year as in the days when he was wont to shoulder his gun and take an active share in them. The last time I saw him, but a short while before his death, he was

as eager for news of ornithology and ornithologists as he ever displayed in the days of his activity, and his mind was clear and showed no evidence of his great age. The end was peaceful, and he passed away only a few days after the death of his wife, to whom during the period of her long illness, he had ever exhibited a touching, affectionate devotion rarely witnessed.

With Lawrence ends an era of our science in the New World. In a certain sense he belonged to the past, to the ranks of those who directed ornithological science into a new path in the middle of this century before a large proportion of the present workers were born, and although he wrote and published as late as four years ago, his name is best associated with those long since passed from earth. What he did, he did well, to the best of his ability, and he has left an unblemished record and an untarnished name. Happy for that Science! Happy for that land! which can claim for its own men like this, pure in life and mind, devoted to the interests which command the highest thought of their being, and which bring good to the many. There is one more escutcheon on Fame's temple wall, one more name inscribed in line of golden light, and as we contemplate this life, and behold the "upright man and the just," and mark his peaceful passing from earth's familiar scenes, we seem to hear, as though from out a cloud illumined with celestial fire, a voice uttering the solemn admonition —

"So live, that when thy summons comes
[Thou too shall] approach thy grave
Like one that wraps the drapery of his couch
About him, and lies down to pleasant dreams."

